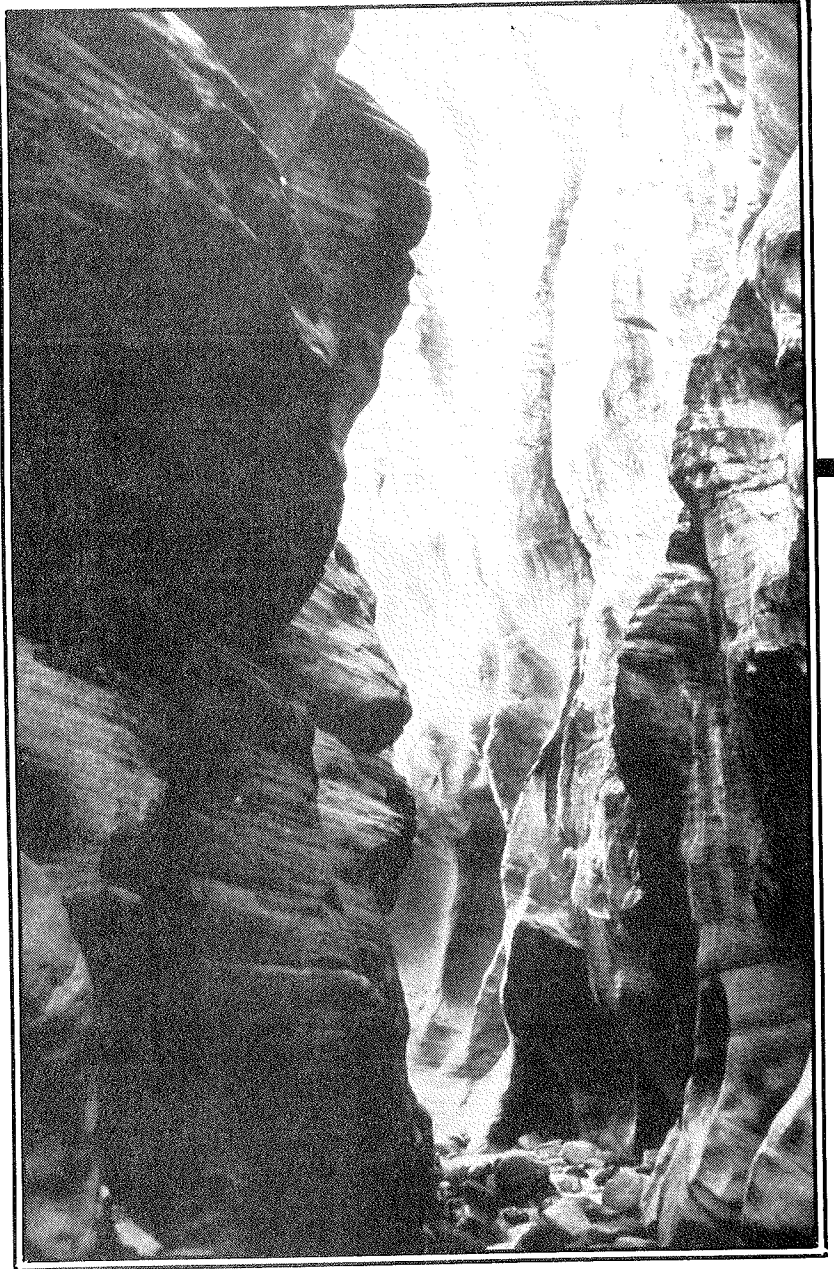
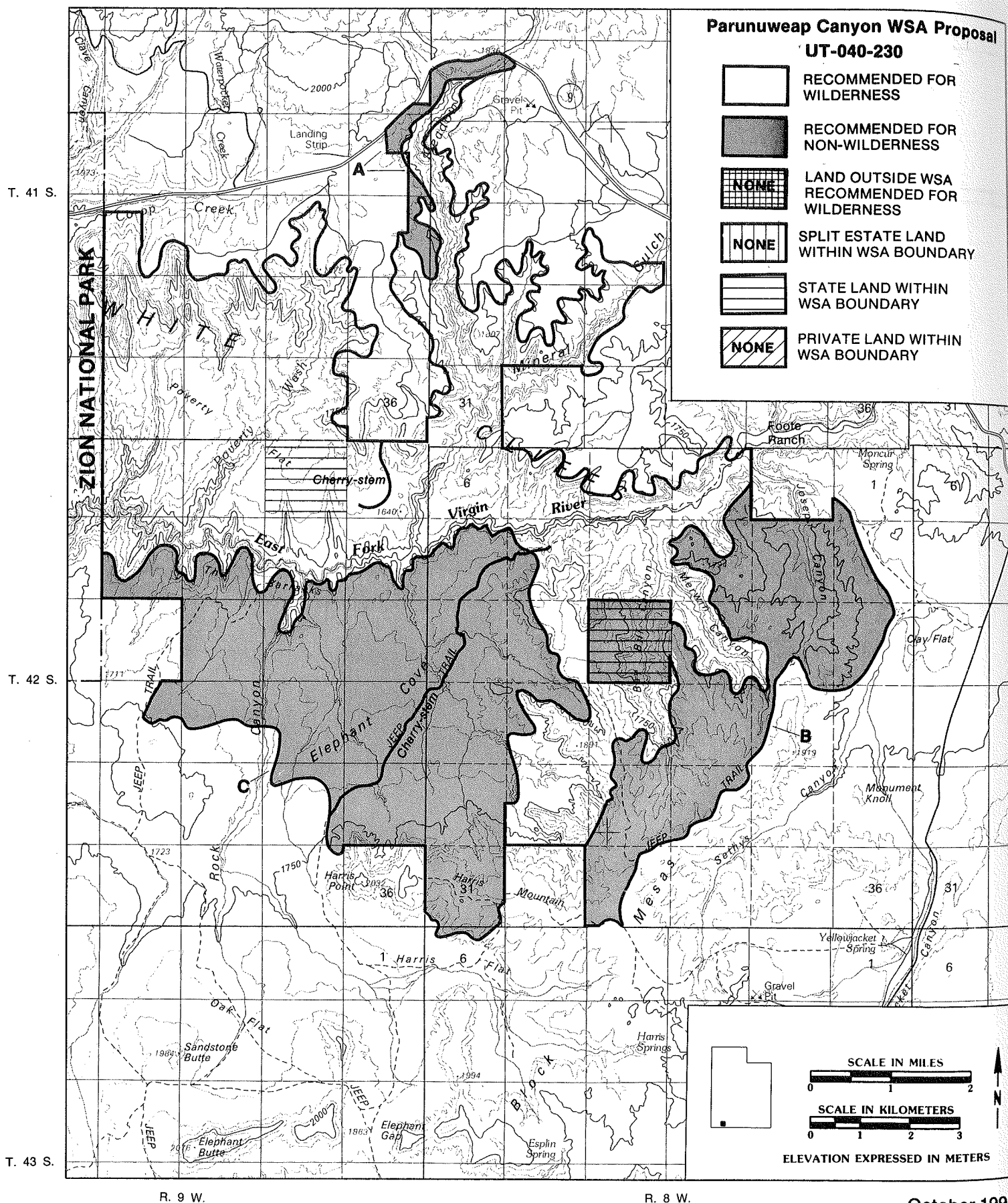


# Parunuweap Canyon WSA



## PARUNUWEAP CANYON WSA



# **PARUNUWEAP CANYON WILDERNESS STUDY AREA**

## **1. THE STUDY AREA: 30,800 acres**

The Parunuweap Canyon Wilderness Study Area (WSA) (UT-040-230) is in western Kane County, about 25 miles northwest of Kanab, Utah (population 2,148). The WSA is an irregularly shaped unit, 10 miles at the maximum from north to south and 10 miles from east to west. The study area includes 30,800 acres of public land administered by the Bureau of Land Management (BLM) (see Map). Two sections (1,253 acres) of State land are inside the WSA boundaries (see Table 1). No private or split-estate lands are within the study area. The western boundary of the WSA is contiguous with Zion National Park for approximately 4.8 miles.

The northern boundary is partly along fields, chainings, and topographic contours and partly along the periphery of State and private lands. The southern boundary generally follows roads. The WSA includes the portion of the East Fork of the Virgin River between Mt. Carmel Junction and Zion National Park. The area is characterized by the main, east-west oriented canyon (Parunuweap) and steep tributary canyons, surrounded by buttes and mesas. The southwestern part of the WSA, south of Parunuweap Canyon, is a relatively flat area. Elevations range from about 4,800 feet in the East Fork of the Virgin River Canyon to 6,600 feet on Harris Mountain at the southern end of the WSA.

**TABLE 1  
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA\***

<b>WITHIN THE WSA</b>	<b>ACRES</b>
BLM (surface and subsurface)	30,800
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	1,253
<b>Total</b>	<b>32,053</b>
<b>WITHIN THE RECOMMENDED WILDERNESS BOUNDARY</b>	
BLM (within the WSA)	17,888
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
<b>Total BLM land recommended for wilderness</b>	<b>17,888</b>
In-holdings (State, private)	613
<b>WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS</b>	
BLM	12,912
Split-Estate	0
<b>Total BLM land not recommended for wilderness</b>	<b>12,912</b>
In-holdings (State, Private)	640

Source: BLM File Data

\* The Appendix is a detailed table of in-holdings included within the portion of the WSA recommended for designation.

## PARUNUWEAP CANYON WILDERNESS STUDY AREA

Vegetation is almost entirely pinyon-juniper woodland with a sparse understory of shrubs, and a few scattered stands of Ponderosa pine.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990.

Four alternatives were analyzed in the EIS: a partial wilderness where 17,888 acres would be recommended as wilderness and 12,912 acres would be released for uses other than wilderness, which is the recommendation in this report; a no wilderness (no action) alternative; an all wilderness alternative; and a smaller partial wilderness alternative of 7,400 acres.

### 2. RECOMMENDATION AND RATIONALE:

- 17,888 acres  
(recommended for wilderness)
- 12,912 acres  
(recommended for nonwilderness)

The recommendation for this WSA is to designate 17,888 acres in the WSA as wilderness and to release the remaining 12,192 acres for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts.

The 17,888-acre wilderness alternative is recommended because it would include the best wilderness values of the WSA and exclude Areas A, B, and C in which possible developments, including 300 acres of land treatment for rangeland improvement, are proposed. The recommended alternative would also exclude all State lands except for one section (see Table 1). The recommended area includes the site of a proposed reservoir for the East Fork of the Virgin River. Wilderness designation would prevent development of the reservoir. However, the reservoir may not be constructed regardless of wilderness des-

ignation because of its close proximity to Zion National Park, problems regarding Federal water rights, and the endangered fish species in the Virgin River.

Wilderness designation would also complement the National Park Service (NPS) administratively endorsed wilderness proposal for the adjacent portion of Zion National Park (see Map) and the NPS preference that adjacent lands be managed in a manner consistent with wilderness preservation in the Park. Little or no conflicts with other uses exist, and the high wilderness potential in the recommended portion outweigh potential uses of other resources.

### 3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

#### Wilderness Characteristics

##### A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. More than 99 percent of the WSA meets the criteria for naturalness. Much of the WSA resembles the lands within the adjacent Zion National Park. The WSA exhibits naturalness that closely corresponds with the remote character of the southeastern area of the National Park. A total of 16 miles of ways and fences, reservoirs, and corrals are visible in the WSA, disturbing less than 1 percent of the area. In 1987, 10 to 12 acres of pinyon-juniper woodland was cleared in the eastern part of the WSA. This action trespassed from adjacent private land. The disturbance was reclaimed.

##### B. Solitude

Approximately 17,600 acres (57 percent of the WSA) provide opportunities for outstanding solitude. About 17,000 acres would be included in the portion recommended for wilderness designation.

Opportunities for solitude vary considerably within the WSA. In general, the deeper, more irregular canyons and areas of eroded sandstone offer the best opportunities for solitude, but small

## PARUNUWEAP CANYON WILDERNESS STUDY AREA

areas with sand dunes and the more densely vegetated parts of the WSA also provide seclusion.

Some locations provide both topographic and vegetative screening from outside sights and sounds and other visitors.

Although solitude is present on the remaining 13,200 acres of the WSA, the opportunity is not considered to be of the exceptional quality found in the area adjacent to the National Park or in areas such as the Parunuweap Canyon on the East Fork of the Virgin River.

### C. Primitive and Unconfined Recreation

Primitive recreation opportunities are outstanding on 17,500 acres, or 57 percent of the WSA.

About 17,000 acres are in the portion recommended for wilderness. Portions of the WSA are excellent for a diversity of recreational activities, including backpacking, rock climbing, photography, and sightseeing.

Hiking through Parunuweap Canyon and into Zion National Park is the objective of backpacking. Several access routes are possible through tributary canyons north and south of the main canyon. Rock climbing opportunities are best on the White Cliffs in the northern and eastern parts of the WSA and in The Barracks of the lower part of Parunuweap Canyon. Numerous scenic areas for sightseeing and photography include the main canyon and main tributaries, bare rock exposures adjacent to the National Park, and the White Cliffs. The opportunities for primitive recreation on the remaining 13,200 acres are not considered to be outstanding in the context of the exceptional opportunities present in the areas discussed above.

### D. Special Features

Fifty-eight percent of the WSA (17,800 acres) is considered to exhibit outstanding scenic quality that is comparable to scenery in Zion National Park. About 14,100 acres are within the portion recommended for wilderness designation.

A major historical feature is the Elephant Gap or Foote Ranch Road, believed to follow the pioneer route between Pipe Springs, Arizona, and Long Valley, Utah. About 4.5 miles of this route are cherry-stemmed from the WSA and 4 miles are considered to be a way within the WSA.

The endangered bald eagle occasionally roosts in the WSA in winter. The endangered peregrine falcon may occasionally visit the WSA. The sensitive golden eagle may also sometimes inhabit or nest in the WSA.

Other sensitive U.S. Fish and Wildlife Service (FWS) candidate threatened or endangered animal species that may inhabit the WSA include Merriam's kangaroo rat, Virgin River montane vole, ferruginous hawk, Swainson's hawk, southern spotted owl, long-billed curlew, mountain plover, western snowy plover, western yellow-billed cuckoo, Arizona Bell's vireo, white-faced ibis, and Great Basin Silverspot butterfly.

FWS candidate threatened or endangered plant species that may occur in the WSA are Asplenium andrewsii, Erigeron sionis, Heterotheca jonesii, and Sphaeromeria ruthiae. Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information.

### Diversity in the National Wilderness Preservation System (NWPS)

#### A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a combination of potential natural vegetation (PNV) ecosystems not presently represented in Utah or in the NWPS. The WSA is in the Colorado Plateau Province/Ecoregion. The PNV type in the WSA is juniper-pinyon woodland. This type is represented nationally in the NWPS, is widely represented in other BLM study areas both in and outside of Utah, and is represented in the NWPS in one wilderness in Utah. This information is summarized in Table 2 from data compiled in December 1989.

# PARUNUWEAP CANYON WILDERNESS STUDY AREA

TABLE 2  
ECOSYSTEM REPRESENTATION

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	11	1,401,745	84	2,113,205
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,675,398

Source: BLM File Data.

## B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of Salt Lake City-Ogden, Utah; Provo-Orem, Utah; and Las Vegas, Nevada. Table 3 shows the number and acreage of designated wilderness areas and of other BLM study areas within a 5-hour drive of these population centers.

## C. Balancing the Geographic Distribution of Wilderness Areas

The Parunuweap Canyon WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS. As of January, 1987, the NWPS included 65 wilderness areas comprising 2,898,792 acres in Utah, Arizona, and Nevada. Twelve designated wilderness areas are within 100 miles of the WSA.

TABLE 3  
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Salt Lake City-Ogden, Utah	11	1,099,962	78	2,258,871
Provo-Orem, Utah	11	721,793	90	2,786,064
Las Vegas, Nevada	38	3,132,130	54	2,175,694

Source: BLM File Data.

In a clockwise direction beginning to the north, are the 7,000-acre Ashdown Gorge Wilderness (Forest Service [FS]), the 25,751-acre Box-Death Hollow Wilderness (FS), the 112,400-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 40,539-acre Saddle Mountain Wilderness (FS), the 70,460-acre Kanab Creek Wilderness (FS and BLM units), the 6,860-acre Cottonwood Point Wilderness (BLM), the 7,880-acre Mt. Trumbull Wilderness (BLM), the 14,650-acre Mt. Logan Wilderness (BLM), the 37,030-acre

Grand Wash Cliffs Wilderness (BLM), the 87,900-acre Paiute Wilderness (BLM), the 18,630-acre Beaver Dam Mountains Wilderness (BLM), and, to the west, the 50,000-acre Pine Valley Mountain Wilderness (FS).

Manageability (The area must be capable of being effectively managed to preserve its wilderness character.)

The portion of the WSA that is recommended for wilderness designation can be



## PARUNUWEAP CANYON WILDERNESS STUDY AREA

managed as wilderness to preserve values now present in the area. Only one section of State land is within the recommended portion, but it is at the north-central edge of the recommended area and providing access would not present problems.

The Washington County Water Conservancy District has proposed a 40,000 acre-foot reservoir on the East Fork of the Virgin River within the WSA. Seven possible construction sites have been identified within the WSA. Preliminary studies of the project have been completed, but detailed feasibility and engineering studies have not been undertaken and applications have not been filed with the BLM. Wilderness designation would preclude construction within the WSA and wilderness designation of the adjacent portion of Zion National Park would prevent construction within that portion of the Park. Further, construction of a dam in these areas is unlikely because of the proximity of Zion National Park, because Federal reserved water rights are being asserted by the NPS downstream from the proposed sites and because there are endangered fish in the Virgin River downstream of the WSA.

No mineral leases or mining claims are held in the WSA. The portion recommended for wilderness designation would include a little more than half (184) of the 331 animal unit months of usable livestock forage, but wilderness designation would do little more than cause minor inconvenience to eight grazing permittees due to closure of ways. Livestock management would continue essentially as it is without affecting the wilderness qualities of the recommended area. Recreation management could also continue as at present. No other development proposals have been made for lands or resources within the proposed portion of the WSA.

The portion of the WSA that is not recommended for wilderness designation could also be managed as wilderness. Administration and control of such activities as off-highway vehicle use (OHV) and firewood cutting would be more difficult in this part of the WSA because it is flatter and more accessible than the recommended areas.

### Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) prepared a mineral assessment report for this WSA (USGS Bulletin 1746-B, R.E. Van Loenen, et al., 1988). The report indicates that the mineral and energy potential for oil and gas is moderate, but is low for undiscovered resources of silver, uranium, coal, and geothermal energy. Six million tons of gypsum are just inside the northern boundary of the WSA, but this resource is unlikely to be developed because larger and more accessible deposits are known elsewhere in the region, including reserves just outside the study area. The likelihood of additional gypsum within the WSA is low. Large quantities of inferred common-variety sandstone, gravel, and limestone exist in the study area, but they are classified as inferred subeconomic resources.

### Impacts on Resources

the comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

### Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

### Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 287 inputs specifically addressing this WSA were received from 302 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the

## PARUNUWEAP CANYON WILDERNESS STUDY AREA

same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 274 commenters supported wilderness designation for part or all of the WSA while 14 commenters were opposed. Fourteen commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented on the wilderness values and special features in the WSA, how wilderness values in the WSA outweigh nonwilderness values, and the absence or relative lack of conflicts with mineral interests. The majority of those commenting in favor of wilderness were from outside the State, but significant numbers were from rural and urban Utah. Of particular concern was the need to complement proposed wilderness areas in adjacent Zion National Park and that BLM had overstated the problems of managing the area as wilderness.

Those opposing wilderness were concerned that wilderness designation would restrict access by the general public in favor of providing access for special groups, harm local economy, and cause water rights and use problems. The majority of those were from rural Utah.

Two Federal agencies, the NPS and USBM, commented on the Draft EIS. The NPS stated that either the all wilderness or large partial wilderness alternatives would afford the benefit of congruous NPS/BLM management. The NPS notes that the net effect would be greater protection of the Virgin River through Parunuweap Canyon because the NPS/BLM users of the canyon are typically one and the same.

The USBM noted that the BLM's Final EIS should include the findings of the USGS and USBM mineral investigations and those findings would be available in November 1989. These findings have been incorporated into the Final EIS and study report.

No comment letters were received on the Final EIS.

There are two sections (1,253 acres) of State land in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State noted that the WSA is considered to be the WSA with the highest wilderness values and highest conflicts in the region. The outstanding wilderness values associated with Parunuweap Canyon are among the best of their kind and these same resources create major conflicts associated with proposed dam sites in Parunuweap Canyon. The State noted that the high degree of controversy over the mutually exclusive land uses requires an extensive public input and analysis of the competing uses.

The Kane County Commission is opposed to wilderness designation of the Parunuweap Canyon WSA. The Commission has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. The Commission commented that wilderness designation would preclude a proposed reservoir that is necessary to meet future irrigation needs of the rapidly expanding Washington County area. The Commission is also opposed to wilderness designation because "wilderness limits visitor utilization possibilities and rejects the multiple use concept."



# PARUNUWEAP CANYON WSA

Table 4  
Comparative Summary of Impacts by Alternative

Alternatives				
Issue Topics	Recommendation Large Partial Wilderness (17,888 Acres)	No Action/No Wilderness (30,800 Acres)	All Wilderness (30,800 Acres)	Small Partial Wilderness (7,400 Acres)
	Wilderness Values	Wilderness Values	Wilderness Values	Wilderness Values
Impacts on Wilderness Values	Wilderness values would be preserved in the designated area which is about 58 percent of the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be lost or reduced on up to 11 percent (3,387 acres) of the WSA, all in the nondesignated portion due to wildlife and rangeland developments and to ORV activity. Special features would not be significantly affected.	Wilderness values would not be protected by wilderness designation and loss would occur as intrusions increase. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be lost or reduced in quality on up to 3,387 acres of the WSA due to wildlife and rangeland developments, and to ORV activity. Special features would not be significantly affected.	Wilderness values would be preserved overall. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be slightly reduced in quality on 5 acres.	Wilderness values would be preserved in the designated area, which is about 25 percent of the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be lost or reduced on up to 11 percent (3,387 acres) of the WSA, all in the nondesignated portion, due to wildlife and rangeland developments and to ORV activity. Special features would not be significantly affected.
Impacts on Vegetation	Effects would be the same as for the No Action/No Wilderness Alternative because the same 307 acres of projected surface disturbance would occur in the WSA.	There would be no impacts on threatened, endangered, or other special status plant species because they do not occur in the areas where disturbance is projected. Projected surface disturbance on 307 acres would alter only about 1 percent of the pinyon-juniper woodland in the WSA.	There would be no significant impacts as vegetation would be provided additional protection from disturbance.	Effects would be the same as for the No Action/No Wilderness Alternative because the same 307 acres of projected surface disturbance would occur in the WSA.
Impacts on Water Resources	Effects on water quality and proposed water developments would be the same as with the No Action/No Wilderness Alternative because the proposed developments and related disturbance would occur in the nondesignated portion of the WSA. Water uses upstream of the WSA would not be affected because of existing requirements for flow downstream of the area.	Present water quality or uses would not be significantly affected in the foreseeable future because increases in sediment from projected disturbance would be small and temporary and water developments would continue under existing constraints.	Water quality would be maintained as at present because surface disturbance would be reduced. Construction of a livestock reservoir would not be allowed but water use upstream of the WSA would not be affected because of existing requirements for flow downstream of the area.	Effects would be the same as for the Large Partial Wilderness Alternative.

# PARUNUWEAP CANYON WSA

Table 4 (Continued)  
Comparative Summary of Impacts by Alternative

Recommendation		Alternatives		
Large Partial Wilderness (17,888 Acres)		No Action/No Wilderness	All Wilderness (30,800 Acres)	Small Partial Wilderness (7,400 Acres)
Impacts on Wildlife Habitat and Populations	Impacts would be the same as with the No Action/No Wilderness Alternative.	Disturbance of 307 acres would temporarily disturb wildlife. However, the 300-acre vegetation treatment would provide additional browse for mule deer and ecotones for other species. Development of water sources would also benefit wildlife.	Designation would provide all species with additional protection from habitat disturbance and opportunities for solitude but would preclude benefits to big game from 300 acres of proposed habitat improvement.	Impacts would be the same as with the No Action/No Wilderness Alternative.
	Impacts would be about the same as with the All Wilderness Alternative because access would be restricted on 7 of the 16 miles of existing ways. However, all proposed developments would be in the nondesignated area.	Livestock management and grazing levels would not be affected. Livestock distribution would be improved by rangeland development.	Restrictions on access to 16 miles of ways would change livestock management and supervision and would inconvenience eight livestock permittees. A proposed reservoir that would improve livestock distribution would be foregone.	Impacts would be the same as with the No Action/No Wilderness Alternative because access would be restricted on only 2 of the 16 miles of existing ways and all proposed developments would be in the nondesignated area.
Impacts on Livestock Management	The quality of primitive recreation opportunities would be protected and enhanced in the designated area, but adversely impacted in the nondesignated area due to continued ORV use. There would be some adverse impact to ORV use through closure of 7 miles of vehicular way. However, the Elephant Cove area would be available for ORV use. Both primitive and motorized recreational use would increase.	The quality of primitive recreation opportunities would be reduced on 11 percent (3,387 acres) by continued use of ORVs on existing routes and in the vicinity of Elephant Cove. Both primitive and motorized recreational use would increase but the quality of the primitive opportunity would decrease.	The quality of primitive recreation opportunities would be protected and enhanced. However, recreational use of motorized vehicles would be eliminated. This use presently accounts for 50 to 75 percent of recreation use in the WSA. Overall visitation would decline initially.	The quality of primitive recreation opportunities would be protected and enhanced in the designated area but would be adversely impacted in the nondesignated area due to continued ORV use. There would be a slight adverse impact to ORV use with the closure of 2 miles of vehicular way. The Elephant Cove area would continue to be available for ORV use. Both primitive and motorized recreational use would increase.

# PARUNUWEAP CANYON WILDERNESS STUDY AREA

Appendix  
Estimated Costs of Acquisition of Non-Federal Holdings Within Areas Recommended for Designation <sup>a</sup>

Legal Description (Prior to any Subdivision)	Total Acreage	Number of Owners (If Parcel has been subdivided)	Type of Ownership by Estate (Federal, State, Private, Other) (Surface Estate) (Subsurface Estate)	Presently Proposed for Acquisition (Yes, No)	Preferred Method of Acquisition (Purchase, Exchange, Other)	Estimated Cost of Acquisition (Land Costs)	Estimated Cost of Acquisition (Processing Costs)
T. 42 S., R. 9 W., Sec. 2	613.24		State	No	Exchange		\$2,000

<sup>a</sup> The estimated costs listed in this appendix in no way represent a Federal appraised value of the land or mineral estate, but are rough estimates based on sales or exchanges of lands or mineral estates with similar characteristics to those included in the WSA. The estimates are for purposes of establishing a range of potential costs to the government of acquiring non-Federal holdings and in no way represent an offer to purchase or exchange at the cost estimate included in this appendix.